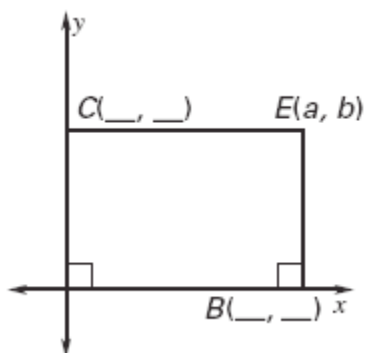


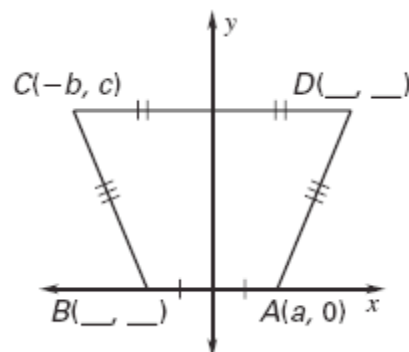
Pre-AP Geometry Date _____ 4.7 Assignment
 Triangles and Coordinate Proof (pp 243-246) Page 1
 Omit 3, 6, & 11
 1. What is your name?

Find the missing coordinates without using any new variables.

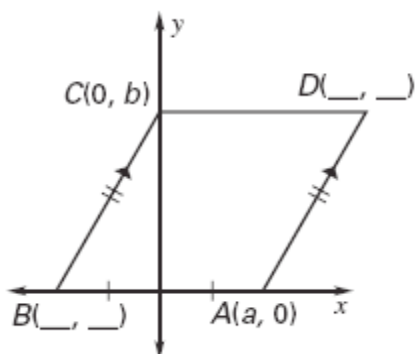
2.



3.

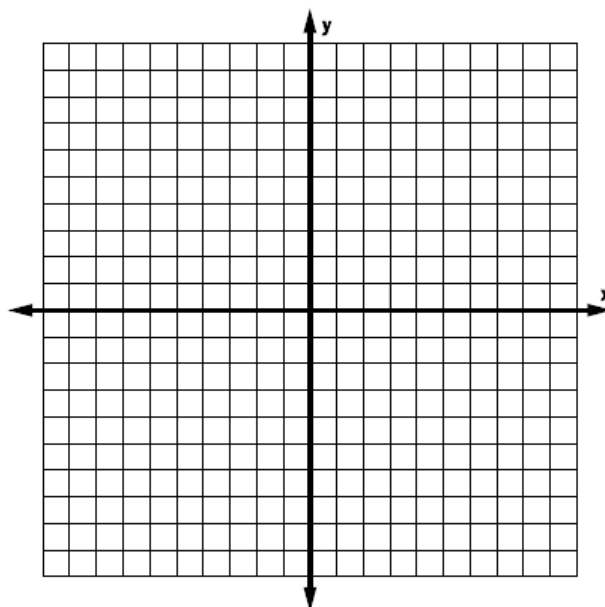


4.



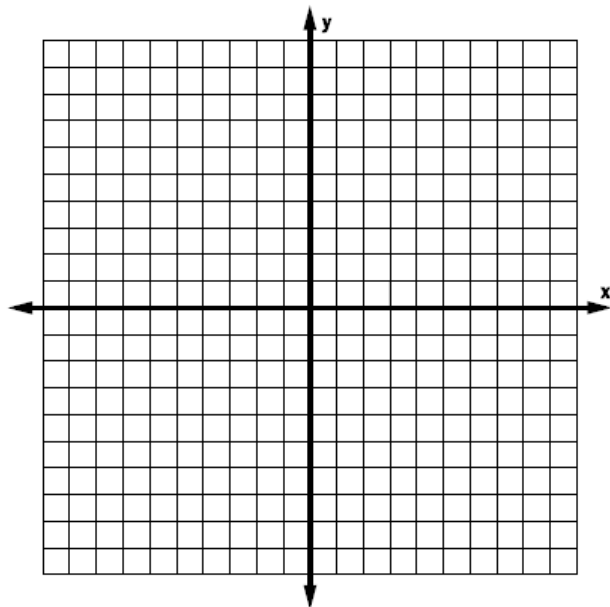
Place the figure in the coordinate plane and find the given information.

5. A right isosceles triangle with legs of a units; find the length of the hypotenuse.

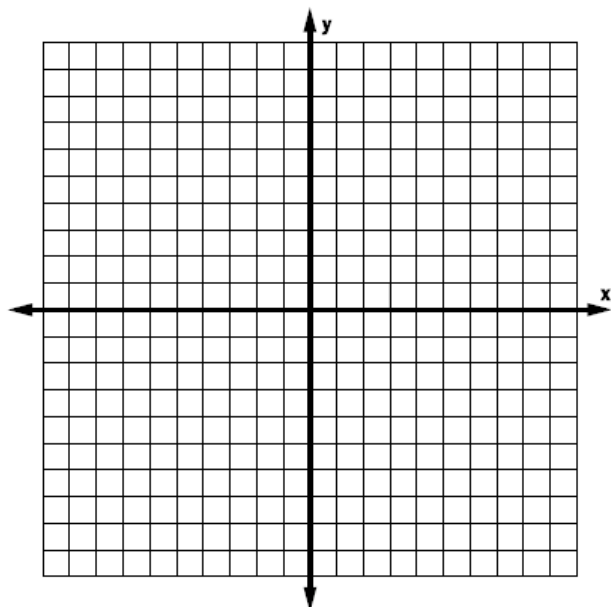


Pre-AP Geometry Date_____ 4.7 Assignment
Triangles and Coordinate Proof (pp 243–246) Page 2
Omit 3, 6, & 11

6. A rectangle with a length of b units and a width of c units; find the length of a diagonal.



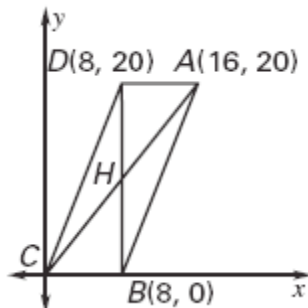
7. A square with a perimeter of $4n$ units; find the length of a diagonal.



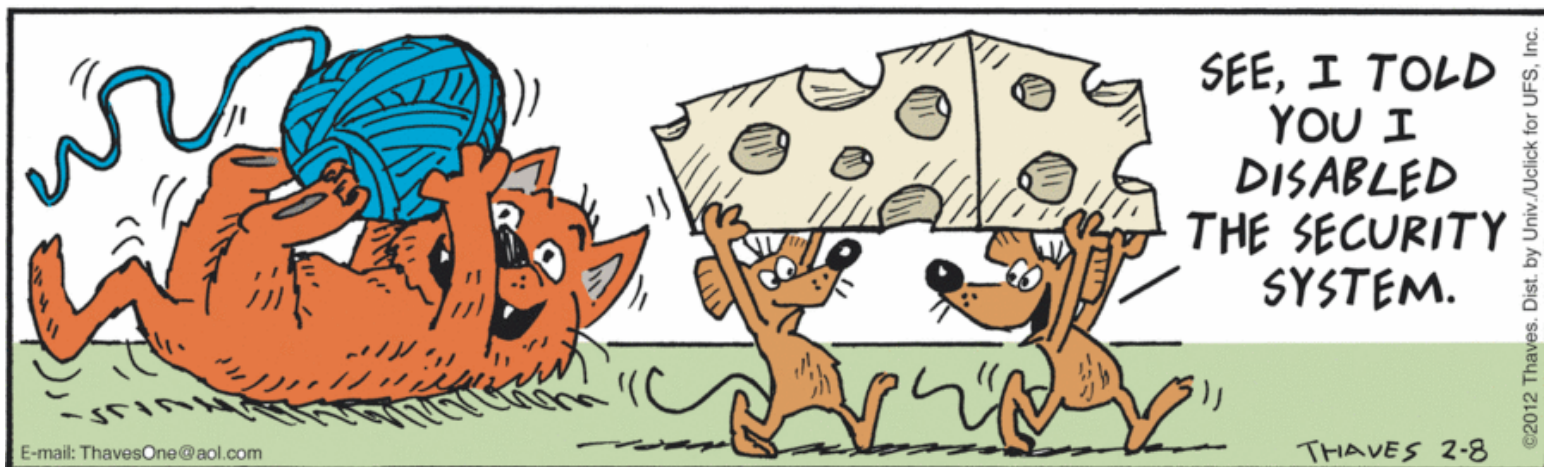
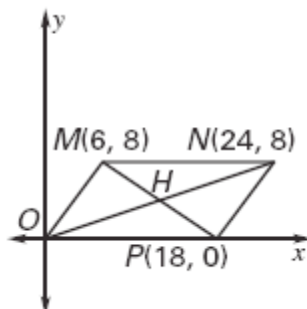
Pre-AP Geometry Date _____ 4.7 Assignment
 Triangles and Coordinate Proof (pp 243-246) Page 3
 Omit 3, 6, & 11

Use the given information and diagram to find the coordinates of H.

8. $\triangle ADH \cong \triangle CBH$



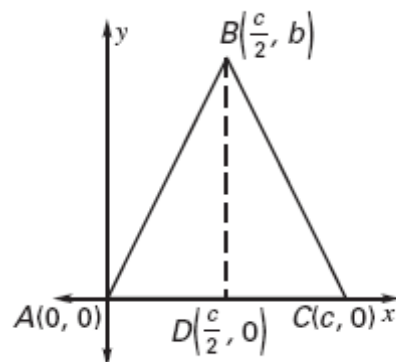
9. $\triangle MHN \cong \triangle PHO$



Pre-AP Geometry Date_____ 4.7 Assignment
 Triangles and Coordinate Proof (pp 243-246) Page 4
 Omit 3, 6, & 11

Write a coordinate proof.

10. Prove: $\triangle ABC$ is isosceles.

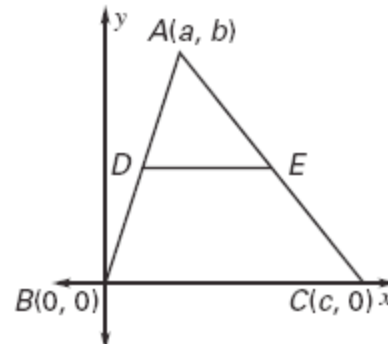


Given: D is the midpoint of \overline{AB} .

E is the midpoint of \overline{AC} .

11.

Prove: $DE = \frac{1}{2}BC$



Pre-AP Geometry Date _____ 4.7 Assignment
Triangles and Coordinate Proof (pp 243–246) Page 5
Omit 3, 6, & 11

12. _____ A square with side length 4 has one vertex at $(0, 2)$. Which of the points below could be a vertex of the square?

- A. $(0, -2)$
- B. $(0, 0)$
- C. $(2, -2)$
- D. $(2, 2)$

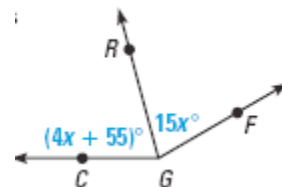
13. _____ A rectangle with side lengths $2h$ and k has one vertex at $(-h, k)$. Which of the points below **could not** be a vertex of the rectangle?

- A. $(-h, 0)$
- B. $(0, k)$
- C. $(h, 0)$
- D. (h, k)

Review.

In the diagram, \overline{GR} bisects $\angle CGF$. (Chapter 1 Section 5)

14. Find the value of x .

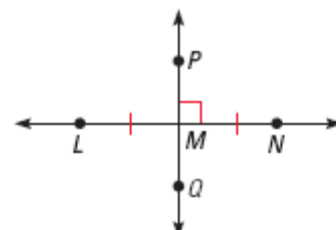


15. Find $m\angle CGF$.



Pre-AP Geometry Date _____ 4.7 Assignment
 Triangles and Coordinate Proof (pp 243–246) Page 6
 Omit 3, 6, & 11

Use the diagram to determine whether the statement is true or false. (Chapter 1 Section 5).



16. _____ $\overline{PQ} \perp \overline{LN}$.
17. _____ Points L, Q, & N are collinear.
18. _____ \overline{PQ} bisects \overline{LN} .
19. _____ $\angle LMQ$ & $\angle PMN$ are supplementary.

Let p be “two triangles are congruent” and let q be “the corresponding angles of the triangles are congruent.” Write the symbolic statement in words. Decide whether the statement is true.

20. $p \rightarrow q$

21. $q \rightarrow p$

22. $\sim p \rightarrow \sim q$

